

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 May 2005 (19.05.2005)

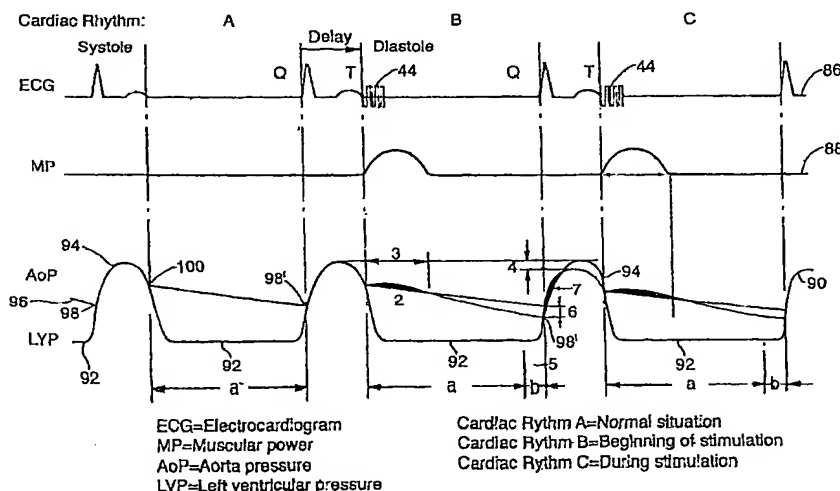
PCT

(10) International Publication Number
WO 2005/044372 A1

- (51) International Patent Classification⁷: **A61N 1/36**
- (21) International Application Number:
PCT/EP2004/012617
- (22) International Filing Date:
8 November 2004 (08.11.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
03025663.0 7 November 2003 (07.11.2003) EP
- (71) Applicant (for all designated States except US): **CORAL LICENSING INTERNATIONAL LTD**; International Trust Building, Wickhams Cay, P.O. Box 659, Road Toen, Tortola (VG).
- (72) Inventor; and
(75) Inventor/Applicant (for US only): **LAPANASHVILI, Larry** [GE/CH]; Im Grafenhag 38, CH-8404 Winterthur (CH).
- (74) Agent: **MANITZ, FINSTERWALD & PARTNER GBR** Patent- und Rechtsanwälte; Postfach 31 02 20, 80102 München (DE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report

[Continued on next page]

(54) Title: **ELECTROTHERAPY APPARATUS AND METHOD OF TREATING A PERSON OR A MAMMAL USING SUCH ELECTROTHERAPY APPARATUS**



(57) Abstract: An electrotherapy apparatus for applying electrical stimulation to a muscle or group of muscles of a person or other mammal, wherein said electrical stimulation comprises electrical pulses, said electrical stimulation having parameters comprising at least some of an amplitude, a pulse repetition frequency, a duration of each pulse or group of pulses and a time offset relative to a predicted end of a T-wave of an electrocardiogram derived from said person or mammal, is characterised in that the electrotherapy apparatus is adapted to vary at least one of said amplitude, said pulse repetition frequency, said duration and said offset in accordance with a predetermined pattern, or randomly, within pre-specified limits in the course of a treatment extending over many heart cycles, typically over more than 15 minutes.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.